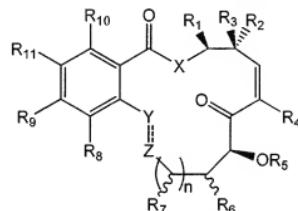


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims

1. (currently amended) A pharmaceutical composition for systemic administration comprising a pharmaceutically suitable carrier or diluent and a compound having the structure:



or a pharmaceutically acceptable salt or ester thereof; wherein

R₁ is hydrogen, C₁-C₂₀ alkyl, C₂-C₂₀ alkenyl, C₂-C₂₀ alkynyl, C₁-C₂₀ heteroalkyl, C₂-C₂₀ heteroalkenyl, C₂-C₂₀ heteroalkynyl, C₃-C₂₀ cycloalkyl, C₃-C₂₀ cycloalkenyl, C₃-C₂₀ cycloalkynyl, C₃-C₂₀ heterocycloalkyl, C₃-C₂₀ heterocycloalkenyl, C₃-C₂₀ heterocycloalkynyl, C₃-C₁₄ aryl or C₃-C₁₄ heteroaryl;

R₂ is methyl;

R₃ is hydrogen or halogen;

R₄ is hydrogen or halogen;

R₅ is hydrogen or an oxygen protecting group;

R₆ is hydrogen, hydroxyl, or hydroxyl with an oxygen protecting group;

n is 1;

R₇ is hydrogen;

R₈ is hydrogen, halogen, hydroxyl, hydroxyl with an oxygen protecting group, or alkoxy;

R₉ is hydrogen, halogen, hydroxyl, hydroxyl with an oxygen protecting group, OR₁₂, SR₁₂,

NR₁₂R₁₃, -X₁(CH₂)_pX₂-R₁₄, or is lower alkyl optionally substituted with hydroxyl, hydroxyl with an oxygen protecting group, halogen, amino, protected amino, or -X₁(CH₂)_pX₂-R₁₄;

wherein R₁₂ and R₁₃ are, independently for each occurrence, hydrogen, C₁-C₂₀ alkyl, C₂-C₂₀ alkenyl, C₂-C₂₀ alkynyl, C₁-C₂₀ heteroalkyl, C₂-C₂₀ heteroalkenyl, C₂-C₂₀ heteroalkynyl, C₃-C₂₀ cycloalkyl, C₃-C₂₀ cycloalkenyl, C₃-C₂₀ cycloalkynyl, C₃-C₂₀ heterocycloalkyl, C₃-C₂₀ heterocycloalkenyl, C₃-C₂₀ heterocycloalkynyl, C₃-C₁₄ aryl or C₃-C₁₄ heteroaryl; or a nitrogen or oxygen protecting group, or R₁₂ and R₁₃, taken together may form a saturated or unsaturated cyclic ring of 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R₁₂ and R₁₃ are optionally further substituted with one or more hydroxyl, hydroxyl with an oxygen protecting group, alkoxy, amino, protected amino, alkylamino, aminoalkyl, or halogen,

wherein X₁ and X₂ are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X₂-R₁₄ together are N₃ or are a saturated or unsaturated heterocyclic moiety;

p is 2-10, and

R₁₄ is hydrogen, or a C₃-C₁₄ aryl, C₃-C₁₄ heteroaryl, C₁-C₂₀ alkyl(C₃-C₁₄)aryl, or C₁-C₂₀ alkyl(C₃-C₁₄)heteroaryl moiety, or is -(C=O)NHR₁₅, -(C=O)OR₁₅, or -(C=O)R₁₅, wherein each occurrence of R₁₅ is independently hydrogen, C₁-C₂₀ alkyl, C₂-C₂₀ alkenyl, C₂-C₂₀ alkynyl, C₁-C₂₀ heteroalkyl, C₂-C₂₀ heteroalkenyl, C₂-C₂₀ heteroalkynyl, C₃-C₂₀ cycloalkyl, C₃-C₂₀ cycloalkenyl, C₃-C₂₀ cycloalkynyl, C₃-C₂₀ heterocycloalkyl, C₃-C₂₀ heterocycloalkenyl, C₃-C₂₀ heterocycloalkynyl, C₃-C₁₄ aryl or C₃-C₁₄ heteroaryl; or R₁₄ is -SO₂(R₁₆), wherein R₁₆ is a C₁-C₂₀ alkyl, C₂-C₂₀ alkenyl or C₂-C₂₀ alkynyl moiety, wherein one or more of R₁₄, R₁₅, or R₁₆ are optionally substituted with one or more hydroxyl, hydroxyl with an oxygen protecting group, alkoxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R₁₀ is hydroxyl, hydroxyl with an oxygen protecting group, or amino;

R₁₁ is hydrogen;

X is O;

Y is CHR₁₇ or CR₁₇; and Z is CHR₁₈ or CR₁₈;

wherein each occurrence of R₁₇ and R₁₈ is hydrogen and wherein Y and Z may be connected by a single or double bond;

wherein oxygen protecting groups are selected from the group consisting of methyl ethers, methoxymethyl ether, methylthiomethyl ether, benzyloxymethyl ether, p-methoxybenzyloxymethyl ether, ethyl ethers, benzyl ethers, silyl ethers, trimethylsilyl ether, triethylsilyl ether, triisopropylsilyl ether, t-butyldimethylsilyl ether, tribenzyl silyl ether, t-butyldiphenyl silyl ether, esters, formate, acetate, benzoate, trifluoroacetate, dichloroacetate, carbonates, cyclic acetals and ketals and wherein nitrogen protecting groups are selected from the group consisting of carbamates, Troc 2,2,2-trichloroethoxy carbonyl, amides, cyclic imides, N-alkyl amines, N-aryl amines, imines, and enamines; and wherein C₃-C₁₄ heteroaryl moieties are selected from cyclic aromatic moieties having from five to ten ring atoms of which one ring atom is selected from S, O and N; zero, one or two ring atoms are additional heteroatoms independently selected from S, O and N; and the remaining ring atoms are carbon.

2. (previously presented) The composition of claim 1, wherein:

R₁ is hydrogen, straight or branched lower alkyl, straight or branched lower heteroalkyl, or C₃-C₁₄ aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more halogen, hydroxyl or hydroxyl with an oxygen protecting group;

R₃ is hydrogen;

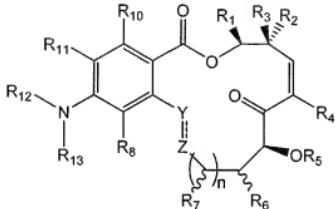
R₉ is hydrogen, halogen, hydroxyl, hydroxyl with an oxygen protecting group, OR₁₂, SR₁₂, NR₁₂R₁₃, -X₁(CH₂)_pX₂-R₁₄, or is lower alkyl optionally substituted with hydroxyl, hydroxyl with an oxygen protecting group, halogen, amino, protected amino, or -X₁(CH₂)_pX₂-R₁₄; wherein R₁₂ and R₁₃ are, independently for each occurrence, hydrogen, lower alkyl, C₃-C₁₄ aryl, C₃-C₁₄ heteroaryl, alkyl(C₃-C₁₄)aryl, or alkyl(C₃-C₁₄)heteroaryl, or a nitrogen or oxygen protecting group, or R₁₂ and R₁₃, taken together may form a saturated or unsaturated cyclic ring of 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R₁₂ and R₁₃ are optionally further substituted with one or more hydroxyl, hydroxyl with an oxygen protecting group, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen,

wherein X_1 and X_2 are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X_2 - R_{14} together are N_3 or are a saturated or unsaturated heterocyclic moiety, p is 2-10, and

R_{14} is hydrogen, or a C_3 - C_{14} aryl, C_3 - C_{14} heteroaryl, alkyl(C_3 - C_{14})aryl, or alkyl(C_3 - C_{14})heteroaryl moiety, or is $-(C=O)NHR_{15}$, $-(C=O)OR_{15}$, or $-(C=O)R_{15}$, wherein each occurrence of R_{15} is independently hydrogen, alkyl, heteroalkyl, C_3 - C_{14} aryl, C_3 - C_{14} heteroaryl, alkyl(C_3 - C_{14})aryl, or alkyl(C_3 - C_{14})heteroaryl, or R_{14} is $-SO_2(R_{16})$, wherein R_{16} is an alkyl moiety, wherein one or more of R_{14} , R_{15} , or R_{16} are optionally substituted with one or more hydroxyl, hydroxyl with an oxygen protecting group, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; and R_{10} is hydroxyl.

3. (canceled)
4. (original) The composition of claim 2, where R_4 is halogen.
5. (previously presented) The composition of claim 2, where R_4 is hydrogen.
6. (original) The composition of claim 2, where Y and Z together represent $-CH=CH-$.
7. (original) The composition of claim 2, where Y and Z together represent trans $-CH=CH-$.
8. (previously presented) The composition of claim 2, wherein R_1 is methyl.
9. (canceled)
10. (original) The composition of claim 8, wherein R_4 is halogen.
11. (original) The composition of claim 8, whercin Y and Z together represent $-CH=CH-$.
12. (previously presented) The composition of claim 8, wherein R_4 is hydrogen and Y and Z together represent $-CH=CH-$.

13. (original) The composition of claim 11 or 12 wherein -CH=CH- is trans.
14. (currently amended) A pharmaceutical composition for systemic administration comprising a pharmaceutically suitable carrier or diluent and a compound having the structure:



or a pharmaceutically acceptable salt or ester thereof; wherein

R₁ is hydrogen, straight or branched lower alkyl, straight or branched lower heteroalkyl, or C₃-C₁₄ aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more halogen, hydroxyl or hydroxyl with an oxygen protecting group;

R₂ is methyl;

R_3 is hydrogen or halogen;

R_4 is hydrogen or halogen;

R₅ is hydrogen or an oxygen protecting group;

R_6 is hydrogen, hydroxyl, or hydroxyl with an oxygen protecting group;

n is 1:

R₇ is hydrogen:

R₈ is hydrogen, halogen, hydroxyl, hydroxyl with an oxygen protecting group, or alkoxy; R₁₂ and R₁₃ are, independently for each occurrence, hydrogen, lower alkyl, C₃-C₁₄ aryl, C₃-C₁₄ heteroaryl, alkyl(C₃-C₁₄)aryl, or alkyl(C₃-C₁₄)heteroaryl, or a nitrogen or oxygen protecting group, or R₁₂ and R₁₃, taken together may form a saturated or unsaturated cyclic ring of 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R₁₂ and R₁₃ are optionally further substituted with one or more hydroxyl, hydroxyl with an oxygen protecting group, alkoxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R₁₀ is hydroxyl, hydroxyl with an oxygen protecting group, or amino;

R₁₁ is hydrogen;

Y is CHR₁₇ or CR₁₇; and Z is CHR₁₈ or CR₁₈;

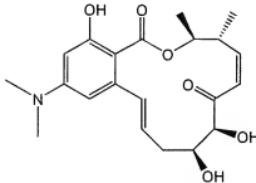
wherein each occurrence of R₁₇ and R₁₈ is hydrogen wherein Y and Z may be connected by a single or double bond;

wherein oxygen protecting groups are selected from the group consisting of methyl ethers, methoxymethyl ether, methylthiomethyl ether, benzyloxymethyl ether, p-methoxybenzyloxymethyl ether, ethyl ethers, benzyl ethers, silyl ethers, trimethylsilyl ether, triethylsilyl ether, triisopropylsilyl ether, t-butyldimethylsilyl ether, tribenzyl silyl ether, t-butyldiphenyl silyl ether, esters, formate, acetate, benzoate, trifluoroacetate, dichloroacetate, carbonates, cyclic acetals and ketals and wherein nitrogen protecting groups are selected from the group consisting of carbamates, Troc 2,2,2 trichloroethoxycarbonyl, amides, cyclic imides, N-alkyl amines, N-aryl amines, imines, and enamines; and
wherein C₃-C₁₄ heteroaryl moieties are selected from cyclic aromatic moieties having from five to ten ring atoms of which one ring atom is selected from S, O and N; zero, one or two ring atoms are additional heteroatoms independently selected from S, O and N; and the remaining ring atoms are carbon.

15. (canceled)
16. (original) The composition of claim 14, wherein R₄ is halogen.
17. (original) The composition of claim 14, wherein Y and Z together represent -CH=CH-.
18. (previously presented) The composition of claim 14, wherein R₁ is methyl.
19. (previously presented) The composition of claim 14, wherein R₁ is methyl, R₄ is hydrogen, and Y and Z together represent -CH=CH-.
20. (original) The composition of claim 17 or 19, wherein -CH=CH- is trans.

21-22. (canceled)

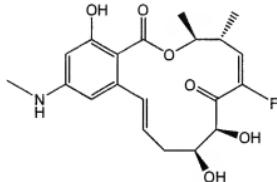
23. (previously presented) The composition of claim 14, wherein the compound has the structure:



or a pharmaceutically acceptable salt or ester thereof.

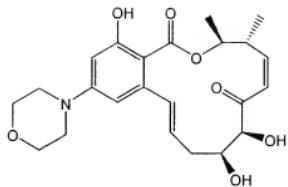
24-26. (canceled)

27. (previously presented) The composition of claim 14, wherein the compound has the structure:



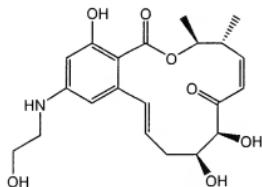
or a pharmaceutically acceptable salt or ester thereof.

28. (previously presented) The composition of claim 14, wherein the compound has the structure:



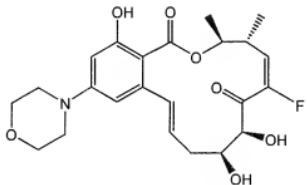
or a pharmaceutically acceptable salt or ester thereof.

29. (previously presented) The composition of claim 14, wherein the compound has the structure:



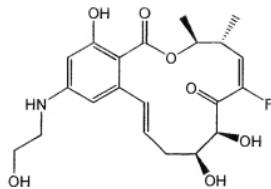
or a pharmaceutically acceptable salt or ester thereof.

30. (previously presented) The composition of claim 14, wherein the compound has the structure:



or a pharmaceutically acceptable salt or ester thereof.

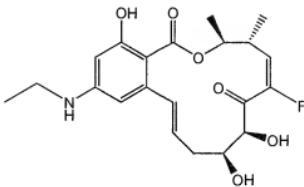
31. (previously presented) The composition of claim 14, wherein the compound has the structure:



or a pharmaceutically acceptable salt or ester thereof.

32. (canceled)

33. (previously presented) The composition of claim 14, wherein the compound has the structure:



or a pharmaceutically acceptable salt or ester thereof.

34-45. (canceled)

46. (withdrawn, previously presented) The composition of claim 2, where R_1 is methyl.

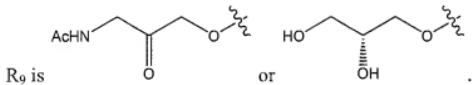
47. (withdrawn, previously presented) The composition of claim 2, where R_4 is halogen.

48. (withdrawn) The composition of claim 2, where R_4 is hydrogen.

49. (withdrawn) The composition of claim 2, where R_5 is hydrogen.

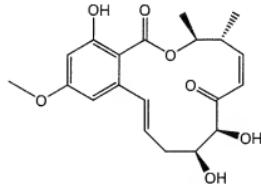
50. (withdrawn) The composition of claim 2, where R_6 is hydroxyl.

51. (canceled)
52. (withdrawn, previously presented) The composition of claim 1, where R₈ is hydrogen.
53. (withdrawn, previously presented) The composition of claim 2, where R₉ is hydroxyl, hydroxyl with an oxygen protecting group, -OR₁₂, -NR₁₂R₁₃, or -O(CH₂)_pX₂-R₁₄, wherein R₁₂, R₁₃, R₁₄ and X₂ are as defined in claim 2.
54. (withdrawn, currently amended) The composition of claim 53, where R₉ is -OR₁₂, wherein R₁₂ is methyl, ethyl, propyl, isopropyl, butyl, Bn benzyl, PMB (MPM) para-methoxybenzyl, 3,4-ClBn 3,4-dichlorobenzyl, or



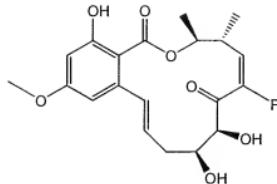
55.-61. (canceled)

62. (previously presented) The composition of claim 1 wherein the compound has the structure:



or a pharmaceutically acceptable salt or ester thereof.

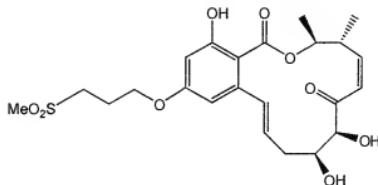
63. (previously presented) The composition of claim 1 wherein the compound has the structure:



or a pharmaceutically acceptable salt or ester thereof.

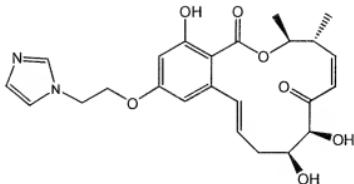
64. (canceled)

65. (previously presented) The composition of claim 1 wherein the compound has the structure:



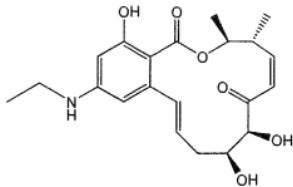
or a pharmaceutically acceptable salt or ester thereof.

66. (previously presented) The composition of claim 1 wherein the compound has the structure:



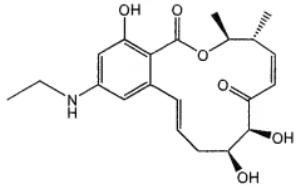
or a pharmaceutically acceptable salt or ester thereof.

67. (previously presented) A pharmaceutical composition for systemic administration comprising a pharmaceutically suitable carrier or diluent and a compound having the structure:

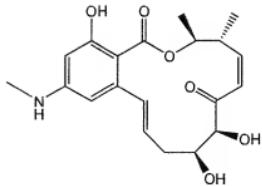


or a pharmaceutically acceptable salt, ester, or salt of ester thereof.

68. (previously presented) The composition of claim 67, wherein the compound is:

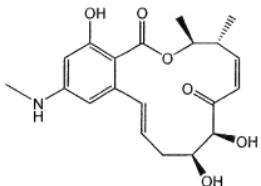


69. (previously presented) A pharmaceutical composition for systemic administration comprising a pharmaceutically suitable carrier or diluent and a compound having the structure:



or a pharmaceutically acceptable salt, ester, or salt of ester thereof.

70. (previously presented) The composition of claim 69, wherein the compound is:



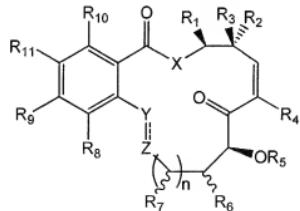
71. (previously presented) The composition of claim 2, wherein R₄, R₅ and R₈ are hydrogen, R₆ and R₁₀ are hydroxyl, and Y and Z together represent trans -CH=CH-.

72. (previously presented) The composition of claim 71, wherein R₁ is methyl.

73. (previously presented) The composition of claim 14, wherein R₄, R₅ and R₈ are hydrogen, R₆ and R₁₀ are hydroxyl, and Y and Z together represent trans -CH=CH-.

74. (previously presented) The composition of claim 73, wherein R₁ is methyl.

75. (currently amended) A pharmaceutical composition comprising a pharmaceutically suitable carrier or diluent and a compound having the structure:



or a pharmaceutically acceptable salt or ester or salt of ester thereof; wherein R₁ is hydrogen, C₁-C₂₀ alkyl, C₂-C₂₀ alkenyl, C₂-C₂₀ alkynyl, C₁-C₂₀ heteroalkyl, C₂-C₂₀ heteroalkenyl, C₂-C₂₀ heteroalkynyl, C₃-C₂₀ cycloalkyl, C₃-C₂₀ cycloalkenyl, C₃-C₂₀

cycloalkynyl, C₃-C₂₀ heterocycloalkyl, C₃-C₂₀ heterocycloalkenyl, C₃-C₂₀ heterocycloalkynyl, C₃-C₁₄ aryl or C₃-C₁₄ heteroaryl; R₂ is methyl; R₃ is hydrogen or halogen; R₄ is hydrogen or halogen; R₅ is hydrogen or an oxygen protecting group; R₆ is hydrogen, hydroxyl, or hydroxyl with an oxygen protecting group; n is 1; R₇ is hydrogen; R₈ is hydrogen, halogen, hydroxyl, hydroxyl with an oxygen protecting group, or alkoxy; R₉ is hydrogen, halogen, hydroxyl, hydroxyl with an oxygen protecting group, OR₁₂, SR₁₂, NR₁₂R₁₃, -X₁(CH₂)_pX₂-R₁₄, or is lower alkyl optionally substituted with hydroxyl, hydroxyl with an oxygen protecting group, halogen, amino, protected amino, or -X₁(CH₂)_pX₂-R₁₄; wherein R₁₂ and R₁₃ are, independently for each occurrence, hydrogen, C₁-C₂₀ alkyl, C₂-C₂₀ alkenyl, C₂-C₂₀ alkynyl, C₁-C₂₀ heteroalkyl, C₂-C₂₀ heteroalkenyl, C₂-C₂₀ heteroalkynyl, C₃-C₂₀ cycloalkyl, C₃-C₂₀ cycloalkenyl, C₃-C₂₀ cycloalkynyl, C₃-C₂₀ heterocycloalkyl, C₃-C₂₀ heterocycloalkenyl, C₃-C₂₀ heterocycloalkynyl, C₃-C₁₄ aryl or C₃-C₁₄ heteroaryl; or a nitrogen or oxygen protecting group, or R₁₂ and R₁₃, taken together may form a saturated or unsaturated cyclic ring of 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R₁₂ and R₁₃ are optionally further substituted with one or more hydroxyl, hydroxyl with an oxygen protecting group, alkoxy, amino, protected amino, alkylamino, aminoalkyl, or halogen, wherein X₁ and X₂ are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X₂-R₁₄ together are N₃ or are a saturated or unsaturated heterocyclic moiety; p is 2-10, and R₁₄ is hydrogen or a C₃-C₁₄ aryl, C₃-C₁₄ heteroaryl, C₁-C₂₀ alkyl(C₃-C₁₄)aryl, or C₁-C₂₀ alkyl(C₃-C₁₄)heteroaryl moiety, or is -(C=O)NHR₁₅, -(C=O)OR₁₅, or -(C=O)R₁₅, wherein

each occurrence of R₁₅ is independently hydrogen, C₁-C₂₀ alkyl, C₂-C₂₀ alkenyl, C₂-C₂₀ alkynyl, C₁-C₂₀ heteroalkyl, C₂-C₂₀ heteroalkenyl, C₂-C₂₀ heteroalkynyl, C₃-C₂₀ cycloalkyl, C₃-C₂₀ cycloalkenyl, C₃-C₂₀ cycloalkynyl, C₃-C₂₀ heterocycloalkyl, C₃-C₂₀ heterocycloalkenyl, C₃-C₂₀ heterocycloalkynyl, C₃-C₁₄ aryl or C₃-C₁₄ heteroaryl; or R₁₄ is -SO₂(R₁₆), wherein R₁₆ is a C₁-C₂₀ alkyl, C₂-C₂₀ alkenyl or C₂-C₂₀ alkynyl moiety, wherein one or more of R₁₄, R₁₅, or R₁₆ are optionally substituted with one or more hydroxyl, hydroxyl with an oxygen protecting group, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R₁₀ is hydroxyl, hydroxyl with an oxygen protecting group, or amino;

R₁₁ is hydrogen;

X is O;

Y is CHR₁₇ or CR₁₇; and Z is CHR₁₈ or CR₁₈;

wherein each occurrence of R₁₇ and R₁₈ is hydrogen and wherein Y and Z may be connected by a single or double bond;

wherein oxygen protecting groups are selected from the group consisting of methyl ethers, methoxymethyl ether, methylthiomethyl ether, benzyloxymethyl ether, p-methoxybenzyloxymethyl ether, ethyl ethers, benzyl ethers, silyl ethers, trimethylsilyl ether, triethylsilyl ether, triisopropylsilyl ether, t-butyldimethylsilyl ether, tribenzyl silyl ether, t-butyldiphenyl silyl ether, esters, formate, acetate, benzoate, trifluoroacetate, dichloroacetate, carbonates, cyclic acetals and ketals and wherein nitrogen protecting groups are selected from the group consisting of carbamates, Troc 2,2,2-trichloroethoxy carbonyl, amides, cyclic imides, N-alkyl amines, N-aryl amines, imines, and enamines; and wherein C₃-C₁₄ heteroaryl moieties are selected from cyclic aromatic moieties having from five to ten ring atoms of which one ring atom is selected from S, O and N; zero, one or two ring atoms are additional heteroatoms independently selected from S, O and N; and the remaining ring atoms are carbon.

76. (previously presented) The composition of claim 75, wherein:

R₁ is hydrogen, straight or branched lower alkyl, straight or branched lower heteroalkyl, or C₃-C₁₄ aryl,

wherenin the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more halogen, hydroxyl or hydroxyl with an oxygen protecting group;

R₃ is hydrogen;

R₈ is hydrogen;

R₉ is hydrogen, halogen, hydroxyl, hydroxyl with an oxygen protecting group, OR₁₂, SR₁₂, NR₁₂R₁₃,

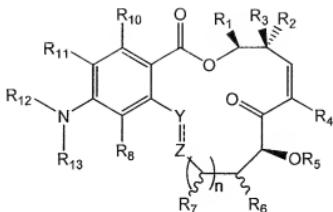
-X₁(CH₂)_pX₂-R₁₄, or is lower alkyl optionally substituted with hydroxyl, hydroxyl with an oxygen protecting group, halogen, amino, protected amino, or -X₁(CH₂)_pX₂-R₁₄;

wherenin R₁₂ and R₁₃ are, independently for each occurrence, hydrogen, lower alkyl, C₃-C₁₄ aryl, C₃-C₁₄ heteroaryl, alkyl(C₃-C₁₄)aryl, or alkyl(C₃-C₁₄)heteroaryl, or a nitrogen or oxygen protecting group, or R₁₂ and R₁₃, taken together may form a saturated or unsaturated cyclic ring of 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R₁₂ and R₁₃ are optionally further substituted with one or more hydroxyl, hydroxyl with an oxygen protecting group, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen,

wherenin X₁ and X₂ are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X₂-R₁₄ together are N₃ or are a saturated or unsaturated heterocyclic moiety, p is 2-10, and

R₁₄ is hydrogen, or a C₃-C₁₄ aryl, C₃-C₁₄ heteroaryl, alkyl(C₃-C₁₄)aryl, or alkyl(C₃-C₁₄)heteroaryl moiety, or is -(C=O)NHR₁₅, -(C=O)OR₁₅, or -(C=O)R₁₅, wherein each occurrence of R₁₅ is independently hydrogen, alkyl, heteroalkyl, C₃-C₁₄ aryl, C₃-C₁₄ heteroaryl, alkyl(C₃-C₁₄)aryl, or alkyl(C₃-C₁₄)heteroaryl, or R₁₄ is -SO₂(R₁₆), wherein R₁₆ is an alkyl moiety, wherein one or more of R₁₄, R₁₅, or R₁₆ are optionally substituted with one or more hydroxyl, hydroxyl with an oxygen protecting group, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; and R₁₀ is hydroxyl.

78. (previously presented) The composition of claim 76, where R₄ is halogen.
79. (previously presented) The composition of claim 76, where R₄ is hydrogen.
80. (previously presented) The composition of claim 76, where Y and Z together represent -CH=CH-.
81. (previously presented) The composition of claim 76, where Y and Z together represent trans -CH=CH-.
82. (previously presented) The composition of claim 76, wherein R₁ is methyl.
83. (canceled)
84. (previously presented) The composition of claim 82, wherein R₄ is halogen.
85. (previously presented) The composition of claim 82, wherein Y and Z together represent -CH=CH-.
86. (previously presented) The composition of claim 82, wherein R₄ is hydrogen and Y and Z together represent -CH=CH-.
87. (previously presented) The composition of claim 85 or 86 wherein -CH=CH- is trans.
88. (currently amended) A pharmaceutical composition comprising a pharmaceutically suitable carrier or diluent and a compound having the structure:



or a pharmaceutically acceptable salt or ester or salt of ester thereof; wherein

R₁ is hydrogen, straight or branched lower alkyl, straight or branched lower heteroalkyl, or C₃-C₁₄ aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more halogen, hydroxyl or hydroxyl with an oxygen protecting group;

R₂ is methyl;

R₃ is hydrogen or halogen;

R₄ is hydrogen or halogen;

R₅ is hydrogen or an oxygen protecting group;

R₆ is hydrogen, hydroxyl, or hydroxyl with an oxygen protecting group;

n is 1;

R₇ is hydrogen;

R₈ is hydrogen, halogen, hydroxyl, hydroxyl with an oxygen protecting group, or alkyloxy;

R₁₂ and R₁₃ are, independently for each occurrence, hydrogen, lower alkyl, C₃-C₁₄ aryl, C₃-C₁₄ heteroaryl, alkyl(C₃-C₁₄)aryl, or alkyl(C₃-C₁₄)heteroaryl, or a nitrogen or oxygen

protecting group, or R₁₂ and R₁₃, taken together may form a saturated or unsaturated cyclic ring of 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R₁₂ and R₁₃ are optionally further substituted with one or more hydroxyl, hydroxyl with an oxygen

protecting group, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R₁₀ is hydroxyl, hydroxyl with an oxygen protecting group, or amino;

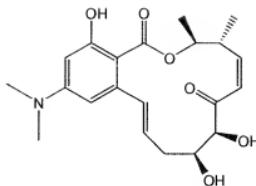
R₁₁ is hydrogen;

Y is CHR₁₇ or CR₁₇; and Z is CHR₁₈ or CR₁₈;

wherein each occurrence of R₁₇ and R₁₈ is hydrogen, wherein Y and Z may be connected by a single or double bond;

wherein oxygen protecting groups are selected from the group consisting of methyl ethers, methoxymethyl ether, methylthiomethyl ether, benzyloxymethyl ether, p-methoxybenzyloxymethyl ether, ethyl ethers, benzyl ethers, silyl ethers, trimethylsilyl ether, triethylsilyl ether, triisopropylsilyl ether, t-butyldimethylsilyl ether, tribenzyl silyl ether, t-butyldiphenyl silyl ether, esters, formate, acetate, benzoate, trifluoroacetate, dichloroacetate, carbonates, cyclic acetals and ketals and wherein nitrogen protecting groups are selected from the group consisting of carbamates, ~~Troc~~ 2,2,2-trichloroethoxycarbonyl, amides, cyclic imides, N-alkyl amines, N-aryl amines, imines, and enamines; and wherein C₃-C₁₄ heteroaryl moieties are selected from cyclic aromatic moieties having from five to ten ring atoms of which one ring atom is selected from S, O and N; zero, one or two ring atoms are additional heteroatoms independently selected from S, O and N; and the remaining ring atoms are carbon.

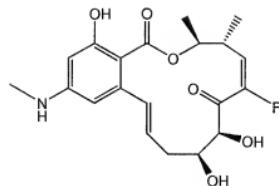
89. (canceled)
90. (previously presented) The composition of claim 88, wherein R₄ is halogen.
91. (previously presented) The composition of claim 88, wherein Y and Z together represent -CH=CH-.
92. (previously presented) The composition of claim 88, wherein R₁ is methyl.
93. (previously presented) The composition of claim 88, wherein R₁ is methyl, R₄ is hydrogen, and Y and Z together represent -CH=CH-.
94. (previously presented) The composition of claim 91 or 93, wherein -CH=CH- is trans.
95. (previously presented) The composition of claim 88, wherein the compound has the structure:



or a pharmaceutically acceptable salt or ester thereof.

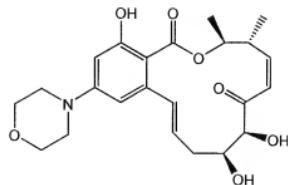
96. (canceled)

97. (previously presented) The composition of claim 88, wherein the compound has the structure:



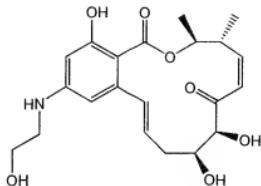
or a pharmaceutically acceptable salt or ester thereof.

98. (previously presented) The composition of claim 88, wherein the compound has the structure:



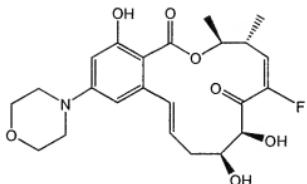
or a pharmaceutically acceptable salt or ester thereof.

99. (previously presented) The composition of claim 88, wherein the compound has the structure:



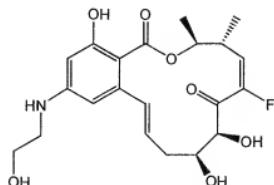
or a pharmaceutically acceptable salt or ester thereof.

100. (previously presented) The composition of claim 88, wherein the compound has the structure:



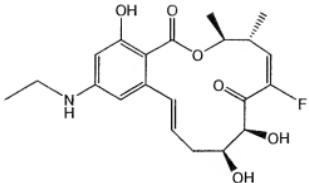
or a pharmaceutically acceptable salt or ester thereof.

101. (previously presented) The composition of claim 88, wherein the compound has the structure:



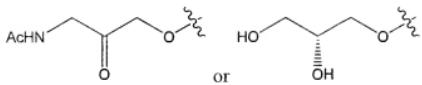
or a pharmaceutically acceptable salt or ester thereof.

102. (previously presented) The composition of claim 88, wherein the compound has the structure:

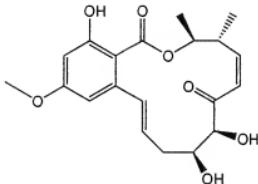


or a pharmaceutically acceptable salt or ester thereof.

103. (previously presented) The composition of claim 76, where R₁ is methyl.
104. (previously presented) The composition of claim 76, where R₄ is halogen.
105. (previously presented) The composition of claim 76, where R₄ is hydrogen.
106. (previously presented) The composition of claim 76, where R₅ is hydrogen.
107. (previously presented) The composition of claim 76, where R₆ is hydroxyl.
108. (previously presented) The composition of claim 75, where R₈ is hydrogen.
109. (previously presented) The composition of claim 76, where R₉ is hydroxyl, hydroxyl with an oxygen protecting group, -OR₁₂, -NR₁₂R₁₃, or -O(CH₂)_pX₂-R₁₄, wherein R₁₂, R₁₃, R₁₄ and X₂ are as defined in claim 76.
110. (currently amended) The composition of claim 109, where R₉ is -OR₁₂, wherein R₁₂ is methyl, ethyl, propyl, isopropyl, butyl, Bn benzyl, PMB (MPM) para-methoxybenzyl, 3,4-ClBn 3,4-dichlorobenzyl, or R₉ is

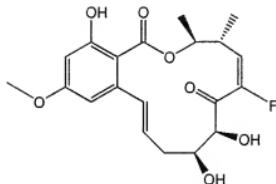


111. (previously presented) The composition of claim 75 wherein the compound has the structure:



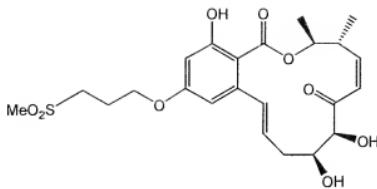
or a pharmaceutically acceptable salt or ester thereof.

112. (previously presented) The composition of claim 75 wherein the compound has the structure:



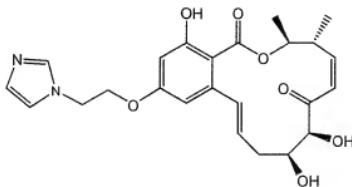
or a pharmaceutically acceptable salt or ester thereof.

113. (previously presented) The composition of claim 75 wherein the compound has the structure:



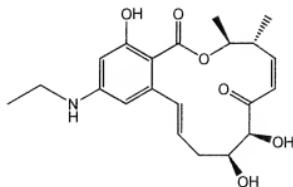
or a pharmaceutically acceptable salt or ester thereof.

114. (previously presented) The composition of claim 75 wherein the compound has the structure:



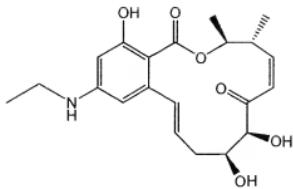
or a pharmaceutically acceptable salt or ester thereof.

115. (previously presented) A pharmaceutical composition comprising a pharmaceutically suitable carrier or diluent and a compound having the structure:

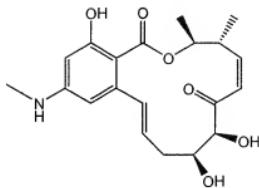


or a pharmaceutically acceptable salt, ester, or salt of ester thereof.

116. (previously presented) The composition of claim 115, wherein the compound is:

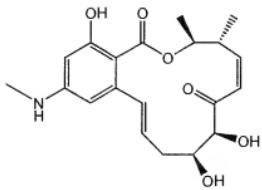


117. (previously presented) A pharmaceutical composition comprising a pharmaceutically suitable carrier or diluent and a compound having the structure:



or a pharmaceutically acceptable salt, ester, or salt of ester thereof.

118. (previously presented) The composition of claim 117, wherein the compound is:



119. (previously presented) The composition of claim 76, wherein R₄, R₅ and R₈ are hydrogen, R₆ and R₁₀ are hydroxyl, and Y and Z together represent trans -CH=CH-.
120. (previously presented) The composition of claim 119, wherein R₁ is methyl.
121. (previously presented) The composition of claim 88, wherein R₄, R₅ and R₈ are hydrogen, R₆ and R₁₀ are hydroxyl, and Y and Z together represent trans -CH=CH-.
122. (previously presented) The composition of claim 121, wherein R₁ is methyl.
123. (previously presented) The composition of claim 8, wherein R₄ is hydrogen.
124. (previously presented) The composition of claim 14, wherein R₄ is hydrogen.
125. (previously presented) The composition of claim 82, wherein R₄ is hydrogen.
126. (previously presented) The composition of claim 88, wherein R₄ is hydrogen.